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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/038,640

01/04/2002

Jonathan S. Stinson

792-62 RCE

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23869 7590 04/04/2007
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EXAMINER

EREZO, DARWIN P

ART UNIT

PAPER NUMBER

3731

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

04/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/038,640 | Applicant(s) STINSON, JONATHAN S. | |
| | Examiner Darwin P. Erez | Art Unit 3731 | |

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,14,15,17,25,52,53,55,57-62,64-68 and 72-93 is/are pending in the application.
- 4a) Of the above claim(s) 1-3,14,15,17,25,52,53,55,57-62,64-68 and 72-75 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 6 and 76-93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species II in the reply filed on 12/18/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-3, 14, 15, 17, 25, 52, 53, 55, 57-62, 64-68 and 72-75 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/18/2006.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 6 and 76-93 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,575,818 to Pinchuk.

(claims 6, 76, 78, 81, 84, 86, 87 and 93) Pinchuk discloses a stent **400** comprising a body insertable structure including a plurality flexible strands **408** selectively formed to provide a discrete first tubular segment **403** and a plurality of discrete second tubular segments, or locking rings **614,616**. Pinchuk discloses that multiple locking rings can be disposed along the body of the stent, which would

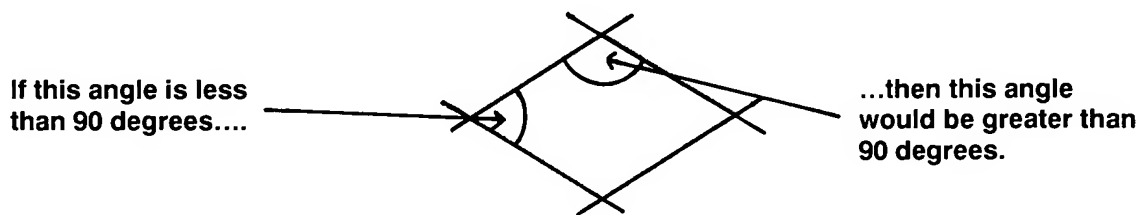
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inherently provide a plurality of discrete first tubular segments (col. 10, lines 20-22).

Therefore, the first and second tubular segments will be arranged in alternating sequence.

Pinchuk further discloses the first and second tubular segments having respective first and second nominal diameters when the tubular structure is in a relaxed state (Fig. 6) and wherein the tubular is radially compressible against an elastic restoring force to a predetermined diameter due to the stent being a self expandable stent.

The first tubular segment **403** also has an obtuse strand crossing angle that is less than an obtuse strand crossing angle of the second tubular segment **614/616**. As seen in the attached figure below, the first tubular segment has two crossing angles: one that is less than 90 degrees and one that would inherently be greater than 90 degrees.



Therefore, since the first tubular segment **403** still has a crossing angle that is less than the crossing angle of the second tubular segment, as seen in Fig. 6, then it is inherent that the first tubular segment has a greater axial stiffness level than the second tubular segment. However, the second tubular segment will have a greater radial force level when compared to the first tubular segment because it has a higher crossing angle.

(claims 77, 79, 80, 85, 88 and 89) The strand crossing angles for each of the first and second tubular segments are constant (substantially the same), therefore, the axial stiffness levels for each of the tubular segments are substantially the same (the same reason applies for the radial force levels).

(claims 82, 83, 90 and 91) The nominal diameters of each of first and second tubular wall segments are substantially the same, while the nominal diameter of the second tubular wall segment is larger than the first (Fig. 6).

(claim 92) The nominal diameter of both the first and second tubular segment can be substantially the same, as seen in the embodiment shown in Fig. 4.

Response to Arguments

5. Applicant's arguments filed 09/18/2006 have been fully considered but they are not persuasive.

The applicant has amended independent claims 6, 76 and 84 to recite that the obtuse crossing angle of the second tubular wall segment is larger than the obtuse strand crossing angle along the first tubular wall segment. The applicant is relying on the fact that the labeled angle θ in Fig. 4 shows an angle that is not obtuse. However, as shown in the attached figure above, if one angle is less than 90 degrees, then the adjacent angle will be more than 90 degrees. The examiner is interpreting this adjacent angle as the "obtuse strand crossing angle of the first tubular wall segment". The applicant has not cited any structural limitations that prevents interpreting this "adjacent angle" as the "crossing angle". Therefore, the examiner could choose any crossing angle for either the first or second tubular structures.

Furthermore, the arrangement of the first tubular segment and the second tubular segment as shown in Fig. 6 still provides the first tubular segment with a greater axial stiffness level than the second tubular segment. It also provides the second tubular segment with a greater radial force level when compared to the first tubular segment.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erezzo whose telephone number is (571) 272-4695. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Darwin P. Erez
Examiner
Art Unit 3731

de


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER

2/14/07